EQUIPMENT TEST LISTS
DESCRIPTION AND USE

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1. GENERAL

1.01 This section describes Equipment Test Lists (ETLs) and their intended use. In addition, a list of issued ETLs is furnished.

1.02 This section is reissued to change the title and to update Table A and to provide additional information on the new format ETL. Revision arrows are used to emphasize significant changes.

1.03 The title for each figure includes a number(s) in parentheses which identifies the paragraph(s) in which the figure is referenced.

1.04 Recommendations for changes, additions, and/or deletions to this section or to ***any ETL*** should be submitted as specified in Section 000-010-015.

1.05 Equipment Test Lists are written and issued to support Controlled Maintenance Plans (CMPs).

1.06 The following CMP sections are currently (or will be shortly) in effect.

SECTION	SYSTEM
010-300-010	Transmission and Signaling Equipment
190-130-010	Stored Program Control System/ Switching Control Center
201-020-510	Switching Systems—General
212-020-510	No. 4 Crossbar
216-020-510	No. 1 Crossbar
218-020-510	No. 5 Crossbar
220-020-510	Crossbar Tandem
225-001-010	Community Dial Offices— Step-by-Step (SXS)
226-020-510	No. 1 SXS
234-020-510	4ESS* Switch

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SECTION	SYSTEM
240-020-510	101 ESS Switch
365-010-007	Digital Transmission Systems
534-001-010	Private Branch Exchange (PBX) Systems

1.07 Equipment Test Lists provide an index and information access system for CMPs listed in this section. These ETLs enable the user to locate equipment tests, inspections, and other requirements found in sections which are necessary for corrective and preventive maintenance. The number of ETLs issued for each documentation division depends upon the structure and content of that division. Figures 1, 2, and 3 provide illustrations of ETLs in the old format; Fig. 4 illustrates an ETL in the new format. New format ETLs, replacing the old format for some systems, were first available for distribution during the first quarter of 1978. Effort is continuing concerning the issue and reissue of ETLs in the new format.

1.08 American Telephone and Telegraph Company standard ETLs have ***not*** been prepared for the following equipment and/or systems:

(a) Equipment or systems for which maintenance tests have not been defined in standard documentation.

(b) Power equipment where performance is covered by application requirements or which is obsolete and little, if any, is in existence.

1.09 Table A provides a list of issued ETLs. The asterisk symbol (*), following the ETL numeric in Table A, denotes that the ETL has been issued in the new format. Table B contains a list of documents which apply to systems with standard CMPs and which have not been included in ETL sections.

1.10 When an ETL is required and a standard one has not been prepared, the ETL should be prepared locally, using a blank Form E-5450 (see Fig. 5).

2. TEST CLASSIFICATIONS AND DEFINITIONS

2.01 All tests, inspections, or other requirements in an ETL are given one of the four classifications described in paragraphs 2.02 through 2.05 of this section. For simplification, the word "test" is used to mean a test, inspection, or other work requirement.

2.02 ***Mandatory Work (MW):*** The MW tests are used to detect actual or potential failures which could ***result in a severe service penalty*** or for which ***indications of failure are missing or obscure.***

(a) The MW tests ***must be performed*** at a frequency equal to or more frequent than that specified in the ETL.

(b) Some equipment is shown as MW because of its importance to the efficient operation of an office (eg, test equipment, ladders, inspection of rubber gloves, etc).

2.03 ***Mandatory Review (MR):*** The MR tests are tests used to detect actual or potential failures which ***do not result in a severe service penalty*** and for which ***indications of a failure are missing or obscure.*** This classification is not used in the PBX Controlled Maintenance Plan.

(a) The MR tests are assigned a frequency, at which time a review must be made to determine if there is a need to perform the test at that time.

(b) During this review, the question must be asked: "Was this test (not a sample) applied to each unit at, or since, the time of the previous review?" If the answer is "Yes," no work is required at this time unless review of corrective maintenance data indicates otherwise. If the answer is "No," the test ***must be applied.*** The CMP for SXS systems should be reviewed to ascertain sampling definitions and instructions. The required review of MR tests at the ETL frequency is intended to protect customer service and prevent accumulated equipment deterioration.

2.04 ***Test Frame (TF):*** The TF tests make use of automatic or semiautomatic test frames or test sets. Some TF tests require manual operations, depending on the nature of the test and the features of the test frame or test set. For TF tests, an asterisk (*) in the FREQ. column of the ETL indicates that the test shall be programmed locally for that office. The frequency of a particular test will depend on; (1) the number of circuits to be tested, (2) the amount of

trouble found by past tests, and (3) the availability of the test frame for scheduled testing. ***This frequency must be entered in the FREQ. column of the ETL used in this office.*** Automatic or semi-automatic TF tests may be used in lieu of manual tests when they are exact substitutions. When this is done, the maximum test interval should correspond to the manual test frequency. For transmission measurements made by the Automatic Transmission Measurement System (ATMS), minimum requirements are specified in other sections. The frequency with which these tests are performed must meet these minimum requirements. In order to be compatible with the Central Office Maintenance Management System (COMMS), the new format ETL shows many former TF routines as MW. In these cases, **TF TEST** appears at the beginning of the routine title or description.

2.05 ***Trouble Tests (TT):*** These tests are not performed at a specified frequency but should be used, when required, to identify and isolate troubles revealed by other indications or analyses.

2.06 For convenience in scheduling, MW, MR, and TF tests are grouped. The TTs are listed separately at the end of each ETL section or at the end of each specific equipment category or test equipment arrangement of the new format ETL.

2.07 Because of the relatively small number of power circuits or units involved in any one office, all tests in power ETLs are shown as MW. This applies even though there are instances where the only effort needed is to review or check the requirement to determine if there is a need to do work. For example, observation of a sight gauge will determine whether lubricant should be added to a bearing; observation of a voltmeter will indicate any need for readjustment of voltage regulation control.

3. FREQUENCY SYMBOLS

3.01 The following frequency symbols indicate when tests are scheduled:

SYMBOL	FREQUENCY
D	Daily
W	Weekly
M	Monthly

The following is an example of the less frequent intervals and are indicated by a number prefix.

SYMBOL	FREQUENCY
2W	Once every 2 weeks
2M	Once every 2 months
3M	Once every 3 months
4M	Once every 4 months
6M	Once every 6 months
9M	Once every 9 months
12M	Once a year
18M	Once every 18 months
24M	Once every 2 years
30M	Once every 30 months
36M	Once every 3 years
48M	Once every 4 years

3.02 On some tests, an asterisk (*) or a number symbol (#) is entered in the FREQ. column:

(a) The asterisk (*) indicates that the ***frequency must be determined locally and be shown in the FREQ. column*** of the ETL. For example:

(1) An asterisk (*) may be entered in the FREQ. column when a transmission test is required. The frequency for performing this test depends on the type of facility involved and can be determined from the appropriate standard documentation.

(2) An asterisk (*) may be entered in the FREQ. column when the frequency of preventive maintenance depends upon office conditions and equipment usage. In this case, the maintenance documentation will generally specify a minimum interval and stipulate an increase in the interval, based on experience and application.

(3) An asterisk (*) may be entered in the FREQ. column for test equipment to be sent to Western Electric under the "Red Ball" plan (see Section 745-004-000).

(b) The number symbol (#) used in the FREQ. column indicates that frequency data are entered in the EQUIPMENT AND WORK DESCRIPTION column as a note following the test.

4. UPDATING EQUIPMENT TEST LISTS (ETLs)

4.01 Equipment Test Lists are reissued annually, on or about September 1, and will include all information covered previously, along with additions, deletions, and/or changes authorized since the last issue of the ETL. If no changes were authorized in the past year, the ETL will not be reissued.

4.02 When a new format ETL is reissued, an arrow will be placed in the margin to identify specific tests that have been added, changed, or deleted.

5. ETL SECTION ARRANGEMENT

5.01 The ETL sections are provided for most documentation divisions which contain maintenance tests required by systems covered by CMPs. Depending on the structure of the documentation, there may be only one ETL for the entire division or there may be several ETLs for one division.

5.02 When only one ETL is provided, it will generally be numbered XXX-001-011. In this case, the ETL is arranged in the same manner as the division numerical index, including layer and sublayer headings. This ETL arrangement will usually apply to divisions which are common to several types of offices or PBX types and to divisions which are not structured for meaningful subject matter divisions.

5.03 When several ETLs are provided for one division, they will generally be numbered XXX-001-011, -012, -013, etc. Each ETL, in this case, will provide tests for a category of equipment, such as AMA, senders, markers, specific PBX type, etc. Tests listed in old format ETLs are arranged in numerical order but index headings are not used.

5.04 New format ETLs will list tests grouped under headings and subheadings that identify the equipment by generic and specific equipment category and by pertinent features and/or options. These headings are consistent with the COMMS program. The Central Office Maintenance Management System is a support system for assisting in the administration of maintenance tasks (see Section 190-305-101).

5.05 A separate data base is provided by COMMS for each system or major group of equipment, such as power systems or 4A and 4M toll switching. These major groups are shown in Table A. Each major group is divided into generic categories. Each generic category becomes a separate section in the new ETLs. Thus, the generic category number establishes the paragraph numbers in new format ETLs. Generic category numbers are also shown in Table A.

5.06 The individual paragraphs (8.1, 8.2, etc, reference A, Fig. 4) identify the specific equipment category within the new format ETL. Within a paragraph or specific category, headings may appear at three indention levels to identify features and options. The first level (reference B, Fig. 4), when used, identifies a test equipment arrangement. Only one of the arrangements listed would apply to a given unit of equipment to be tested. The second level (reference C, Fig. 4) is used to provide instructions for applying the options or features listed in the third level, to indicate that the routines which follow apply to all units, or that they are to be used as trouble tests only. The five specific statements to be used in the second level are as follows:

(a) OPTIONAL FEATURES

(b) OPTIONAL FEATURES, SELECT NO MORE THAN ONE CATEGORY

(c) SELECT ONLY ONE CATEGORY

(d) FOR ALL UNITS

(e) TROUBLE TESTS.

The third level of indention (reference D, Fig. 4) is used to specify the option or feature.

5.07 New format ETLs will be issued for the following systems:

- Digital Transmission
- No. 4 Crossbar
- ◐No. 5 Crossbar (MTF, OTF, ACD, and 3 and 5A)◐
- Step-by-Step (No. 1 and CDO)
- No. 1 Crossbar
- Crossbar Tandem
- Power

- Miscellaneous Switching Equipment
- Miscellaneous Switching Apparatus
- ◊Analog Carrier
- Operator Services
- Microwave Radio
- Miscellaneous Transmission Equipment
- Electronic Switching
- Analog Multiplex Terminal Equipment
- Operations Support and Processors◊

5.08 When ETLs for newly-developed systems are issued, they will be provided in the new format.

6. DESCRIPTION AND USE

6.01 The ETL contains a listing of the tests, inspections, and other requirements for the proper maintenance of equipment and systems. It also provides the recommended intervals for scheduling.

6.02 In new format ETLs, tests for corrective and preventive maintenance that apply to a given piece of equipment can be determined directly from the list by locating the routines listed under the features and options which apply to the particular unit of equipment to be tested. This ETL arrangement is described in paragraphs 5.04 through 5.06.

6.03 For each test, the listing shows the documentation reference, test title, test classification, and maximum interval allowed between scheduled assignments.

6.04 No further identification or distinction will be made between old format and/or new format ETLs. Reference to an ETL is a reference to an Equipment Test List, whatever the format.

6.05 ***The intervals shown in the ETLs supersede all other maintenance intervals in maintenance documentation.*** The tests must be performed at a frequency equal to, or more frequent than, that specified in the ETL. The purpose of doing recurring work at the ETL frequency is to prevent accumulated equipment deterioration which leads to customer service interruptions or to expensive repairs.

6.06 The test intervals listed in the ETL are specified to meet the needs of most offices and PBXs, consistent with reasonable cost. They are intended to establish an effective preventive maintenance program as outlined in the particular CMP.

SECTION 167-001-013
Issue 8, September 1976

POWER SYSTEMS

EQUIPMENT TEST LIST

FOR

POWER PLANTS

LOCATED ON CUSTOMER OR TELEPHONE CO PREMISES

SEE SECTION 010-300-011 FOR EQUIPMENT TEST LIST INSTRUCTION.

Fig. 1—Illustration of Old Format ETL (1.07)

SECTION 167-001-013, ISS 8

EQUIPMENT TEST LIST						
B.S.P.	ISS	TEST OR REQT.	EQUIPMENT AND WORK DESCRIPTION	CLASS	FREQ.	JOB NO.
167-208-301	1		102G J86802 POWER PLANT			
		3.09	*Boost Charge*	MW	12M	
		4.01	*Float Voltage*	MW	M	
		4.02	*Check Fuse Alarm*	MW	12M	
		4.03	*Check HLV Alarm*	MW	12M	
167-210-301	5		105D J86446			
▲ ADDENDUM	3		POWER PLANT			
		3.13	*Calibrate Voltmeter Relay*	MW	12M	
		4.04	*Check Float Voltage*	MW	M	
		4.05	*Check CEMF Operation Where Used*	MW	3M	
		4.06	*Check Low-Voltage Alarm*	MW	12M	
		4.07-	*Check TD Relay Operation*	MW	12M	
		4.09	*Where Used*			
		4.10	*Check High-Voltage Alarm*	MW	12M	
		4.11	*Check Discharge Fuse Alarm*	MW	12M	
167-210-302	4		105E J86814			
▲ ADDENDUM	1		POWER PLANT			
		4.02	*Check Fuse Alarm*	MW	12M	
		4.03	*Check Float Voltage Alarm*	MW	12M	
		4.04	*Check Float Voltage*	MW	M	
167-215-301	9		110A AND 110B PLANTS J86572 AND J86455			
		4.02	*Check Condition of KS-7106 Grid Battery*	MW	6M	
		4.03	*Check Panel Voltmeter*	MW	12M	
		4.04	*Check Regulator Float Voltage Adjustment*	MW	M	
		4.05	*Check Regulator Charge Voltage Adjustment*	MW	M	
		4.06	*Check Transfer of Load*	MW	3M	
		4.07	*Check for Regulation Tube Failure*	MW	6M	
		4.08	*Check for Power Failure Operation*	MW	6M	
		4.09	*Check for Rectifier Electron Tube Failure*	MW	6M	
		4.10-	*Check Discharge*	MW	3M	
		4.12	*Circuit Operation*			
		4.13	*Check Rectifier Fuse Alarm Operation*	MW	12M	
		4.14	*Check Discharge Fuse Alarm Operation*	MW	12M	
		4.15	*Check High-Low Voltage Alarm Operation*	MW	12M	
		4.16	*Check Regulation Alarm Operation*	MW	12M	
			(110A 24-Volt Plant)			

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Fig. 2—Illustration of Old Format ETL (1.07)

SECTION 167-001-013, ISS 8

EQUIPMENT TEST LIST

B.S.P.	ISS	TEST OR REQT.	EQUIPMENT AND WORK DESCRIPTION	CLASS	FREQ.	JOB NO.
167-215-301	9		(Cont)			
		4.17	Check Indicating Alarm Operation	MW	12M	
			(110B 24-Volt Plant)			
167-217-301	10		111A POWER			
			PLANT J86470			
		4.04	Check Battery Voltage	MW	M	
		5.03	Operation of Contactor	MW	3M	
		5.04	Check Fuse Alarms	MW	12M	
		5.05	Check Rectifier Failure Alarm	MW	12M	
		5.06	Check High- and Low-Voltage Alarms	MW	12M	
		5.07	Check Countercell Failure Alarm	MW	12M	
		5.08	Operation of Countercell Control Circuit	MW	12M	
		5.09	Check Rectifier Current Limiting	MW	12M	
		5.10	Panel Voltmeter Accuracy Check	MW	12M	
167-255-301	7		806D (J86596) POWER PLANT			
		4.01	Transfer Load	MW	W	
		4.02	Check Plant Alarms and Transfer Circuits	MW	6M	
		4.03	Check and Switch Batteries	MW	3M	
		4.04	Check Ringing Machines	MW	6M	
		4.05	Check Low and High Tones	MW	W	
167-276-301	2		671A POWER PLANT (J86880) OPERATING METHODS			
		4.03	Output Voltage Check	MW	6M	
		4.04	Meter Accuracy Check	MW	12M	
		4.05	Load Distribution Fuse Alarm Check	MW	6M	
		4.06	Plant Capacitor Fuse Alarm Check	MW	6M	
		4.07	Converter Failure Alarm Checks	MW	6M	
		4.08	±48 Volt Bus Low-Voltage Alarm Check	MW	6M	
167-277-301	1		680A POWER PLANT			
A ADDENDUM	1		J86891A AND J86891B			
		4.01	Clean Ventilating Passages	MW	12M	
		4.02	Line Feed Converter Output Check	MW	M	
		4.03	Line Feed Bay Ground Voltage Check	MW	M	
			(Equipped With Floating Ground Panel)			
		4.04	Converter OUTPUT CURRENT (M1)	MW	6M	
			Ammeter Calibration Check			
		4.05	Converter OUTPUT VOLTAGE (M2)	MW	6M	
			Voltmeter Calibration Check			

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Fig. 3—Illustration of Old Format ETL (1.07)

SECTION 218-001-018
Issue 10, December 1977

EQUIPMENT TEST LIST
1-WAY TOLL TRUNKS
OFFICES WITH MASTER TEST FRAME
NO. 5 CROSSBAR SYSTEMS

CONTENTS PAGE

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8.1 INC INTERTOLL 2
8.2 INC INTERTOLL 2
8.3 OG INTERTOLL 2
8 4 ONA OG INTERTOLL 3
8.5 OG INTERTOLL 4
8.6 AUX OUTGOING 4
8.7 TOLL SWITCHING 5
8.8 INTERTOLL COMPLN 5

8. GENERAL

8.01 This section provides an index and information access system to locate the standard tests applicable to equipment listed in the preceding table of contents. Test classification and frequency of periodic routine are also provided.

8.02 This is the first issuance of the "reformatted ETL" which provides better organization of the various tests. The "reformatted ETLs" replace the ETLs previously provided for this equipment.

8.03 Comments on this section should be made by following the instructions in Bell System Practices (BSP), Section 000-010-015.

8.04 Routine test information is arranged in the following order from left to right: Section number, issue/addendum, test letter or paragraph number, test title, test class, frequency, and the last space is for a locally assigned job number.

8.05 Section 010-300-011 provides Equipment Test List instructions.

Fig. 4—Illustration of New Format ETL (Sheet 1 of 5) (1.07, 5.06)

SECTION 218-001-018

8.0 1-WAY TOLL TRNKS

A → 8.1 1-WAY TOLL TRNKS; INC INTERTOLL

MANUAL TESTS

FOR ALL UNITS

B → 218-274-501 (2/0) C PRETRIP AND TRIP MW 12M _____

AUTOMATIC TESTS WITH APTT

FOR ALL UNITS

218-262-501 (10/0) A PRETRIP AND TRIP MW 12M _____

8.2 1-WAY TOLL TRNKS; INC INTERTOLL

SELECT ONLY ONE CATEGORY

WITH REVERSED BATTERY SIGNALLING

218-252-501 (3/0) F.1 TRUNK SEIZURE,RLS&PAD CONTROL-TRK ARRGD FOR REV BAT.SIGNALING MR 12M _____

WITHOUT REVERSED BATTERY SIGNALLING

218-252-501 (3/0) F TRUNK SEIZURE, RLS, & PAD CONT-THRU CALL MR 24M _____

TROUBLE TESTS

218-252-501 (3/0) A TRK SEIZURE, RLS, & PAD CONT--E&M SIG TT _____

A.1 TRK SEIZURE, RLS--REV BAT. SIG TT _____

B RNG SEL SW--E&M SIG TT _____

B.1 RNG SEL SW--REV BAT. SIG TT _____

C PRETRIP & TRP -- E&M SIG TT _____

C.1 PRETRIP & TRP -- REV BAT. SIG TT _____

D LINE BUSY -- E&M SIG TT _____

D.1 LINE BUSY -- REV BAT. SIG TT _____

E OVERFLOW -- E&M SIG TT _____

E.1 OVERFLOW -- REV BAT. SIG TT _____

THROUGH-SWITCH

218-252-501 (3/0) G OVERFLOW -- E&M SIG TT _____

G.1 OVERFLOW -- REV BAT. SIG TT _____

H SLEEVE BSY IND TO TOLL SWBD--DISTANT TT _____

I SLEEVE BSY IND TO TOLL SWBD-LOCAL TT _____

J TIME-OUT -- E&M SIG TT _____

J.1 TIME-OUT -- REV BAT. SIG TT _____

8.3 1-WAY TOLL TRNKS; OG INTERTOLL

MANUAL TESTS

FOR ALL UNITS

C → 218-272-501 (2/1) I CALL TO TEST LINE MW 12M _____

OPTIONAL FEATURES

D → MESSAGE TIMING

218-272-501 (2/1) B SUPV-ORIG END DISC.-AMA OR MSG TMG OPR MW 12M _____

AMA

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Fig. 4—Illustration of New Format ETL (Sheet 2 of 5) (1.07, 5.06)

218-272-501 (2/1)	B	SUPV-ORIG END DISC.-AMA OR MSG TMG OPR	MW 12M	_____
	D	CANCEL DISCONNECT ENTRY-AMA	MR 24M	_____
AUTOMATIC TESTS WITH APTT				
FOR ALL UNITS				
218-262-501 (10/0)	A	CALL TO TEST LINE	MW 12M	_____
OPTIONAL FEATURES				
AMA				
218-262-501 (10/0)	B	SUPERVISION-ORIG END DISC.	MW 12M	_____
	H	CANCEL DISC. ENTRY	MR 24M	_____
MESSAGE TIMING				
218-262-501 (10/0)	B	SUPERVISION--ORIG END DISC.	MW 12M	_____
8.4 1-WAY TOLL TRNKS; ONA OG INTERTOLL				
MANUAL TESTS				
FOR ALL UNITS				
218-277-506 (2/0)	A	TRUNK SEIZURE AND DISCONNECT	MW 12M	_____
	B	AMA FEATURES (ETS OR LAMA-C NOT PROVIDED)	MR 24M	_____
	E	CALL TO DISTANT OFFICE	MR 12M	_____
	G	AMA FEATURES (ETS OR LAMA-C NOT PROVIDED)	MR 24M	_____
	J	CALL TO DISTANT OFFICE	MW 12M	_____
OPTIONAL FEATURES				
MESSAGE TIMING				
218-277-506 (2/0)	C	TRUNK MESSAGE TIMING (ETS OR LAMA-C NOT PROVIDED)	MR 24M	_____
	H	TRUNK MESSAGE TIMING (ETS OR LAMA-C NOT PROVIDED)	MR 24M	_____
TROUBLE TESTS				
218-277-506 (1/1)	D	TRUNK REORDER	TT	_____
THROUGH-SWITCHED TESTS (TOG)				
218-277-506 (1/1)	F	TRUNK SEIZURE AND DISCONNECT	TT	_____
	I	TRUNK REORDER	TT	_____
MISCELLANEOUS TESTS				
218-277-506 (1/1)	K	TRUNK-BUSY	TT	_____
	L	TONE AND TRANSMISSION SUPPRESSION	TT	_____
	M	PAD CONTROL	TT	_____
	N	CROSS-OFFICE LOCKOUT	TT	_____
	O	OUT OF SERVICE	TT	_____
	P	FALSE-IDLE & FALSE BUSY CONDITIONS (ETS NOT PROVIDED)	TT	_____
AUTOMATIC TESTS WITH APTT				
FOR ALL UNITS				
218-262-501 (10/0)	A	CALL TO DISTANT OFFICE	MR 12M	_____
	BCH	AMA FEATURES	MR 24M	_____

Fig. 4—Illustration of New Format ETL (Sheet 3 of 5) (1.07, 5.06)

SECTION 218-001-018

218-262-501	(10/0)	C,F	TRUNK SEIZURE AND DISC.	MW 12M	_____
8.5 1-WAY TOLL TRNKS; OG INTERTOLL					
MANUAL TESTS					
FOR ALL UNITS					
218-268-501	(6/0)	D	CALL TO DISTANT OFFICE	MW 12M	_____
OPTIONAL FEATURES					
ARRANGED FOR AMA					
218-268-501	(6/0)	J	CANCEL DISC. ENTRY-AUX TRK ARR FOR AMA (ETS OR LAMA-C NOT PROVIDED)	MR 24M	_____
ARRANGED FOR SUBSCRIBER ACCESS					
218-268-501	(6/0)	I	CHG & NONCHG SUPV-AUX TRK CKT-CUST ACC	MR 24M	_____
TROUBLE TESTS					
216-268-501	(6/0)	A	TRUNK SEIZURE AND RELEASE	TT	_____
		B	TRUNK OVERFLOW	TT	_____
		C	TRUNK BUSY	TT	_____
		E	PAD CONTROL	TT	_____
		F	TIMED RELEASE	TT	_____
		G	BUSY IND TO TOLL SWDB--TESTING AT RR FR	TT	_____
		H	BUSY IND TO TOLL SWDB--TESTING AT TOLL SWDB	TT	_____
		K	TRK MB & SPLT--REMOTE TEST FROM TLG TST BD	TT	_____
AUTOMATIC TESTS WITH APTT					
FOR ALL UNITS					
218-262-501	(10/0)	A	CALL TO DISTANT OFFICE	MW 12M	_____
OPTIONAL FEATURES					
ARRANGED FOR AMA					
218-262-501	(10/0)	H	CANCEL DISC. ENTRY	MR 24M	_____
ARRANGED FOR SUBSCRIBER ACCESS					
218-262-501	(10/0)	B,C	CHARGE AND NONCHARGE SUPV	MR 24M	_____
8.6 1-WAY TOLL TRNKS; AUX OUTGOING					
MANUAL TESTS					
OPTIONAL FEATURES, SELECT NO MORE THAN ONE CATEGORY					
SWITCHED ACCESS					
218-267-501	(6/0)	B	CALL TO TEST LINE IN DISTANT OFFICE	MW 12M	_____
WITH RINGDOWN INTERTOLL					
218-266-501	(3/0)	B	CALL TO OPERATOR IN DISTANT OFFICE	MR 12M	_____
TROUBLE TESTS					
218-266-501	(2/0)	A	TRUNK SEIZURE AND RELEASE	TT	_____
		C	TRUNK BUSY	TT	_____
		D	BUSY INDICATION FROM TOLL SWITCHBOARD	TT	_____
		E	BUSY INDICATION TO TOLL SWITCHBOARD	TT	_____
		F	PAD ARRANGEMENT	TT	_____

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Fig. 4—Illustration of New Format ETL (Sheet 4 of 5) (1.07, 5.06)

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        218-266-501  (2/0)   G     FALSE-BUSY AND FALSE-IDLE CONDITIONS          TT      _____
        218-267-501  (6/0)   A     TRUNK SEIZURE AND RELEASE                     TT      _____
                             C     CALL TO OPERATOR IN DISTANT OFFICE            TT      _____
                             D     OVERFLOW                                      TT      _____
                             E     TRUNK BUSY                                    TT      _____
                             G     FALSE-BUSY AND FALSE-IDLE CONDITIONS          TT      _____
                             H     TIMED RELEASE FEATURE--AUX OGT                TT      _____
                             I     BUSY INDICATION FROM TOLL SWITCHBOARD         TT      _____
                             J     BUSY INDICATION TO TOLL SWITCHBOARD           TT      _____
    AUTOMATIC TESTS WITH APTT
      SELECT ONLY ONE CATEGORY
        SWITCHED ACCESS
          218-262-501  (10/0)  A     CALL TO TEST LINE IN DISTANT OFFICE           MW 12M  _____
8.7 1-WAY TOLL TRNKS; TOLL SWITCHING
    MANUAL TESTS
      SELECT ONLY ONE CATEGORY
        SWITCHED ACCESS
          218-267-501  (6/0)   B     CALL TO TEST LINE IN DISTANT OFFICE           MW 12M  _____
        OPERATOR ACCESS
          218-254-501  (5/0)   A     CALL TO INCOMING TRUNK TEST LINE              MW 12M  _____
                               B     RINGING                                       MW 12M  _____
      TROUBLE TESTS
          218-254-501  (6/0)   C     RERING--TRUNKS ARR FOR CONT START OF RING     TT      _____
                               D     COIN CONTROL                                  TT      _____
                               E     CALL TO BUSY LINE                             TT      _____
        OPR CONF TRKS ARR FOR LOCAL & TANDEM COMP OR TANDEM COMP & OPERATOR
          JUNCTORS
          218-254-501  (6/0)   G     OVERFLOW                                      TT      _____
                               H     TRUNK IDLE OR TRUNK BUSY LAMP INDICATIONS     TT      _____
                               I     TRUNK GROUP BUSY                              TT      _____
                               J     SLEEVE BUSY INDICATION AT SWITCHBOARD         TT      _____
                               K     TRUNK BUSY INDICATION DURING TRUNK RELEASE    TT      _____
                               L     REORDER                                       TT      _____
                               M     RERING                                        TT      _____
    AUTOMATIC TESTS WITH APTT
      SELECT ONLY ONE CATEGORY
        SWITCHED ACCESS
          218-262-501  (10/0)  A     CALL TO TEST LINE IN DISTANT OFFICE           MW 12M  _____
8.8 1-WAY TOLL TRNKS; INTERTOLL COMPLN
    TROUBLE TESTS
        218-269-501  (8/0)   A     CALL TO TOLL TB OR TOLL SWBD                  TT      _____
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Fig. 4—Illustration of New Format ETL (Sheet 5 of 5) (1.07, 5.06)

SECTION--, ISS-- AT & TCo Standard

EQUIPMENT TEST LIST

B.S.P.	ISS	TEST OR REQT.	EQUIPMENT AND WORK DESCRIPTION	CLASS	FREQ.	JOB NO.

TABLE A

ETLs THAT HAVE BEEN ISSUED

GENERIC	SECTION	TITLE
		MISCELLANEOUS APPARATUS
1	024-001-011*	Amplifiers
2	024-001-012*	Controllers and Control Units
3	024-001-013*	Regulators
4	024-001-014*	Electron Tubes
5	026-001-011*	Rotary Selectors
6	026-001-012*	Miscellaneous Selectors
7	026-001-013*	Fuses
8	026-001-014*	Starters and Compensators
9	026-001-015*	Circuit Breakers and Contactors
10	028-001-011*	Autotransformers
11	028-001-012*	Rheostats
12	030-001-011*	Selector Switches
13	030-001-012*	Calculagraphs, Clocks, Timers
14	030-001-013*	Cameras, Photo Processing
15	030-001-014*	Counters, Registers, Ticketers
16	030-001-015*	Switches
17	032-001-011*	Electrolytic Capacitors
18	034-001-011*	Recording Equipment
19	034-001-012*	Distributors for Teletypewriters
20	040-001-011*	Relays
21	065-001-011*	Furniture Fixture Appliance
22	069-001-011*	Cleaning, Reconditioning Apparatus
23	075-001-011*	Tools and Material
24	028-001-013*	Bells, Buzzers, Chimes, and Sounders
25	028-001-014*	Dials, Hand Telephone Sets
26	076-001-011*	Tape Splicer and Card Coder
		TEST EQUIPMENT
	106-001-011	Electrical Test Equipment — Outside Plant
	107-001-011	Data and Teletypewriter Equipment
		MISCELLANEOUS EQUIPMENT
1	100-001-011*	Test Equipment
2	179-001-011*	Signaling Circuits
3	201-001-011*	Distributing Frames
4	201-001-012*	Sequence Signal Circuit
5	252-001-011*	Traffic Data Recording Equipment
6	201-001-013*	Alarms
7	201-001-014*	Recorded Announcement System
8	201-001-015*	Dial Long Lines Circuit
9	201-001-016*	Coin Station Test Line
10	201-001-018*	PBX Automatic Identifier
11	201-001-020*	Billing Systems

* Denotes the ETL has been issued in the new ETL format.

TABLE A (Contd)

ETLs THAT HAVE BEEN ISSUED

GENERIC	SECTION	TITLE
		MISCELLANEOUS EQUIPMENT (Contd)
12	201-001-026*	Tone Supply Circuits
13	201-001-021*	Order Wire Circuits
14	201-001-022*	Group Alerting System
15	201-001-023*	Emergency Line Circuit
16	201-001-024*	Operator Training Equipment
17	201-001-025*	Miscellaneous Communication System Circuits
18	201-001-027*	No. 1 Trunk Concentrator
19	201-001-028*	No. 14 and No. 17 Local Test Desks
		POWER SYSTEMS EQUIPMENT
1	155-001-011*	Alternators, AC or DC Motor Driven
2	155-001-012*	Alternators, Gasoline Engine Driven
3	155-001-013*	Alternators, Diesel Engine Driven Manual
4	155-001-014*	Alternators, Diesel Engine Driven Automatic
5	155-001-015*	Alternators, Gas Turbine Engine Driven
6	155-001-016*	Main Control Cabinet
7	155-001-017*	Charging Generators
21	155-001-018*	Ringing and Coin Control Generators
8	157-001-011*	C.O. Batteries PB
9	157-001-012*	General Batteries
10	159-001-011*	Gasoline Engines
11	159-001-012*	Motors
12	159-001-013*	Drives
13	161-001-011*	Air Dryers and Compressors
14	161-001-012*	Dehydrators and Waveguide Pressure Systems
15	161-001-013*	Exhauster Sets and Fans
16	161-001-014*	Air Blowers, Tube Cooling Systems and Ventilation Equipment
17	161-001-015*	Converters
18	161-001-016*	Inverters
19	163-001-011*	Interrupters
20	163-001-012*	Ringing Sets
22	163-001-013*	Ringing and Tone Machine
23	167-001-011*	Ringing and Tone Power Plants
24	167-001-012*	Power Plants
25	167-001-013*	Power Supplies
26	169-001-011*	Rectifiers, J-Code
27	171-001-011*	Miscellaneous Equipment
28	169-001-012*	Rectifiers, KS-Type
29	169-001-013*	Rectifiers, Miscellaneous

* Denotes the ETL has been issued in the new ETL format.

TABLE A (Contd)

ETLs THAT HAVE BEEN ISSUED

GENERIC	SECTION	TITLE
		OPERATIONS SUPPORT & PROCESSORS
1	190-001-011*	Engineering and Administration Data Acquisition Service (EADAS)
2	190-001-012*	Automatic Message Accounting (ATA)
3	190-001-013*	Automatic Trouble Reporting System (ATRS)
4	190-001-014*	No. 2 Switching Control Center System (SCCS)
5	190-001-015*	Centralized Automatic Reporting On Trunks (CAROT)
6	190-001-016*	Integrated Facilities and Force Administration System (IFFAS)
7	190-001-017*	T-Carrier Administration System (TCAS)
8	252-001-013*	Service Evaluation System (SES) No. 1A
9	254-001-012*	3B20D MOD 1 Processor
10	254-001-013*	3B20D MOD 2 Processor
		NO. 4A AND 4M TOLL SWITCHING SYSTEMS
1	212-001-012*	Links and Connectors
2	212-001-013*	Link Controllers and Markers
3	212-001-014*	Senders and Registers — 4A
4	212-001-016*	Traffic Administration Circuits
5	212-001-017*	Intertoll Trunks
6	212-001-018*	Toll Connecting Trunks
7	212-001-019*	Transmission Trunks
8	212-001-020*	Operator Trunks
9	212-001-021*	Other Miscellaneous Trunks
10	212-001-022*	Announcement Trunks
11	212-001-023*	Centralized Automatic Message Accounting (CAMA) Equipment
12	212-001-024*	ETS and SPC
13	212-001-025*	Test and Miscellaneous Frames
14	212-001-026*	Miscellaneous Fuse Alarms
		SWITCHING SYSTEMS
	205-001-011	Automatic Data Test Circuits
	210-001-011	Service Observing Dests — No. 12 and Modified No. 7
	210-001-013	Information and Toll Directory Desks
	211-001-012	Common to More Than One Toll Office or Toll Switchboard
	211-001-013	No. 1 Toll Office and Toll Switchboard
	211-001-014	No. 3 Toll Office and Toll Switchboard
	211-001-015	No. 5 Toll Switchboard
	211-001-016	No. 6 Toll Switchboard
	211-001-017	No. 6A Teletypewriter Switchboard

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TABLE A (Contd)

ETLs THAT HAVE BEEN ISSUED

GENERIC	SECTION	TITLE
		NO. 1 CROSSBAR EQUIPMENT
1	216-001-011*	Alarms
2	216-001-012*	Fuse Alarms
3	216-001-013*	Automatic Message Accounting (AMA)
4	216-001-014*	Automatic Number Identification (ANI)
5	216-001-015*	Code Compressor
6	216-001-016*	District Junctor
7	216-001-017*	Links and Connectors
8	216-001-018*	Line Controls and Connectors
9	216-001-019*	Markers and Connectors
10	216-001-020*	Miscellaneous Markers and Connectors
11	216-001-021*	Senders Terminating
12	216-001-022*	Senders Originating
13	216-001-023*	Sender Links
14	216-001-025*	Test Frames
15	216-001-026*	Trunks
		NO. 3 AND 5A CROSSBAR EQUIPMENT
1	218-003-011*	Connectors and Links
2	218-003-012*	Markers
3	218-003-013*	Registers and Senders
4	218-003-014*	Trunks
5	218-003-015*	Trunk Transmision Tests
6	218-003-016*	Miscellaneous Circuits
7	218-003-017*	ANI Equipment
8	218-004-012*	No. 3 Crossbar Connector Links
9	218-004-013*	No. 3 Crossbar Markers
10	218-004-014*	No. 3 Crossbar Registers and Senders
11	218-004-015*	No. 3 Crossbar Trunks
12	218-004-016*	No. 3 Crossbar Miscellaneous
		NO. 5 CROSSBAR OFFICES — AUTOMATIC CALL DISTRIBUTION
1	218-005-011*	Conectors and Links
2	218-005-012*	Markers and Registers
3	218-005-013*	Miscellaneous Features and Common Equipment
4	218-005-014*	Trunks

* Denotes the ETL has been issued in the new ETL format.

TABLE A (Contd)

ETLs THAT HAVE BEEN ISSUED

GENERIC	SECTION	TITLE
		NO. 5 CROSSBAR OFFICES — OFFICES WITH MASTER TEST FRAME
1	218-001-011*	Connectors and Links
2	218-001-012*	Markers
3	218-001-013*	Registers
4	218-001-014*	Senders
5	218-001-015*	AMA-ANI
6	218-001-016*	Intraoffice Trunks
7	218-001-017*	Interoffice Trunks
8	218-001-018*	1-Way Toll Trunks
9	218-001-019*	2-Way Toll Trunks
10	218-001-020*	Miscellaneous Trunks
11	218-001-021*	Junctors
12	218-001-022*	Miscellaneous Equipment — Feature Circuits
13	218-001-023*	Miscellaneous Equipment — Common Items
14	218-001-024*	Miscellaneous — TRF REG and ALM
15	218-001-025*	Miscellaneous Maintenance and Emergency
16	218-001-026*	Miscellaneous Equipment — Supply
17	218-001-027*	Centrex
18	218-001-028*	Centrex Trunks
19	218-001-029*	Wideband Circuits
20	218-001-030*	Wideband Trunks
21	218-001-031*	Electronic Translation System
22	218-001-032*	Call Data Transmitter
		NO. 5 CROSSBAR OFFICE — OFFICES WITH OFFICE TEST FRAME
1	218-002-011*	Connectors, Links and Marker — Connectors
2	218-002-012*	Markers
3	281-002-013*	Registers
4	218-002-014*	Senders
5	218-002-015*	AMA-ANI
6	218-002-016*	Intraoffice Trunks
7	218-002-017*	Interoffice Trunks
8	218-002-018*	1-Way Toll Trunks
9	218-002-019*	2-Way Toll Trunks
10	218-002-020*	Miscellaneous Trunks
11	218-002-021*	Junctors
12	218-002-022*	Miscellaneous Equipment Feature
13	218-002-023*	Miscellaneous — TRF REG and ALM
14	218-002-024*	Miscellaneous Equipment Common Items
15	218-002-025*	Miscellaneous and Emergency Action Items
16	218-002-026*	Miscellaneous Equipment Supply
17	218-002-027*	Call Data Transmitter

* Denotes the ETL has been issued in the new ETL format.

TABLE A (Contd)

ETLs THAT HAVE BEEN ISSUED

GENERIC	SECTION	TITLE
		CROSSBAR TANDEM EQUIPMENT
1	220-001-011*	Common Equipment
2	220-001-012*	Senders
3	220-001-013*	Incoming Trunks
4	220-001-014*	Test Frames
5	220-001-015*	Test Frames and Miscellaneous
6	220-001-016*	Fuse Alarms
7	220-001-017*	CAMA Equipment
8	220-001-018*	No. 100A Traffic Service Position
9	220-001-019*	Outgoing Trunks
		ELECTRONIC SWITCHING SYSTEMS
1	231-001-011*	1 ESS 2-Wire Switch
2	231-001-012*	1 ESS 4-Wire Switch
3	231-001-013*	1 ESS 2-Wire Switch, Alarms
4	231-001-014*	1 ESS 4-Wire Switch, Alarms
5	231-001-017*	1A ESS Switch, System Evaluation
6	231-001-019*	1/1A ESS Switch Network
7	231-001-021*	1/1A ESS Switch, Special Application
8	231-001-022*	1/1A ESS Switch, Service Circuits
9	231-001-023*	1/1A ESS Switch, Trunks
10	232-001-011*	No. 2/2B ESS Switch
11	232-001-012*	No. 2 ESS Switch
12	232-001-013*	No. 2B ESS Switch
13	232-001-014*	No. 2/2B ESS Switch, Trunks
14	233-001-011*	No. 3 ESS Switch
15	234-001-011*	No. 4 ESS Switch
16	235-001-011*	No. 5 ESS Switch
17	254-001-011*	1A Processor
18	240-001-011*	No. 101 ESS Switch
		COMMUNITY DIAL OFFICES — NO. 1 SXS
1	225-001-011*	Line Switch, Plunger Type
2	225-001-012*	Master Switches, Plunger Type
3	225-001-013*	Out Trunk Switches
4	225-001-014*	Equipment Unique to 350A Office
5	225-001-015*	Equipment Unique to 355A Office
6	225-001-016*	Equipment Unique to 356A Office
7	225-001-017*	Equipment Unique to 360A Office
8	225-001-018*	Equipment Unique to 35-E-97 Office
9	225-001-019*	Equipment Unique to 375A/B Office
10	255-001-020*	Equipment Unique to North Electric Co. Office

* Denotes the ETL has been issued in the new ETL format.

TABLE A (Contd)

ETLs THAT HAVE BEEN ISSUED

GENERIC	SECTION	TITLE
		NO. 1 STEP-BY-STEP OFFICES
11	226-001-011*	Line and Trunk Finders
12	226-001-012*	Local Selectors
13	226-001-013*	Toll Selectors
14	226-001-014*	Toll Transmission Loop Dial Selectors
15	226-001-015*	Toll Transmission Repeated Dial Selectors
16	226-001-016*	Miscellaneous Selectors
17	226-001-017*	Connectors
18	226-001-018*	Pulse Repeaters and Out Trunk Switches
19	226-001-019*	Trunks and Trunk Circuits
20	226-001-020*	Alarms
21	226-001-021*	Miscellaneous Equipment
		INTERTOLL DIALING, CAMA, AMA, ANI, TOUCH-TONE® CALLING AND COMMON CONTROL — SXS OFFICES
22	227-001-011*	Intertoll Dial Circuits
23	227-001-012*	SAMA Equipment
24	227-001-013*	CAMA Equipment
25	227-001-014*	ANI Equipment
26	227-001-015*	TOUCH-TONE Non-Common Control
	227-001-016	TOUCH-TONE Calling Equipment — Not Adaptable for Common Control
27	227-001-017*	Common Control for TOUCH-TONE and Controlled Outpulsing
		OPERATOR SERVICES
1	250-001-011*	Traffic Service Position System (TSPS) No. 1
2	250-001-012*	Alarms, Traffic Service Position System (TSPS) No. 1
3	250-001-013*	Traffic Service Position (TSPS) No. 1, Stored Program Control
4	250-001-014*	Position, Console, Disk
5	250-001-015*	Automatic Interrupt System
6	250-001-016*	Traffic Service Position (TSPS) No. 1B
		TRANSMISSION SYSTEMS AND TESTING
	309-001-011	Switched Services Networks
	310-001-011	Nonswitched Special Services System
	311-001-011	Switched Special Services Systems
	312-001-011	Private Line Data Systems and Services
	314-001-011	Digital and Analogue Data Transmission Systems
	318-001-011	Television Systems
	320-001-011	Program Transmission Systems and Services
	332-001-011	Voice Frequency Telephone Repeaters Pilot Wire Regulators, Echo Suppressors, Composite Sets and Associated Equipment
	333-001-011	Interoffice Signaling Systems
	340-001-011	PICTUREPHONE® Services Baseband Video Transmission
	354-001-011	Frequency Generating Systems
	355-001-011	K-Carrier Telephone Systems and Associated Equipment Components

* Denotes the ETL has been issued in the new ETL format.

TABLE A (Contd)

ETLs THAT HAVE BEEN ISSUED

GENERIC	SECTION	TITLE
		TRANSMISSION SYSTEMS AND TESTING (Contd)
	357-001-011	Wire Line Entrance Links and Broadband Entrance Links and Interconnection
	358-001-011	Type L1 Carrier Telephone System and Associated Equipment Components
	359-001-011	L3, L4, L4S, L5, and L5E Carrier System
	360-001-011	Maintenance Center Test — Equipment Components Type L1 and L3 Carrier Telephone Systems
	361-001-011	Service Center Tests — Type N, O, and ON Carrier Systems
		ANALOG MULTIPLEX TERMINAL EQUIPMENT
1	356-001-011*	Common Equipment
2	356-001-012*	K Carrier
3	356-001-013*	Multi-MG Trunk Arrangement
4	356-001-014*	LMX-1
5	356-001-015*	MMX-1
6	356-003-016*	LMX-2
7	356-001-017*	L60A/L120A LMX-2
8	356-001-018*	LMX-1/LMX-2
9	356-001-019*	1A Radio Digital System
10	356-001-020*	MMX-2 and MGT
11	356-001-021*	LWM WB Modem
		ANALOG CARRIER
1	362-001-011*	N1 Carrier
2	362-001-012*	N2 Carrier
3	362-001-013*	N3 Carrier
4	362-001-014*	O, ON, O-H, ON-H CX
5	362-001-015*	N4 Carrier
6	359-001-011*	L3 Carrier
7	359-001-012*	L Carrier Common
8	359-001-013*	L4 and L4S Carrier
9	359-001-014*	L5 and L5E Carrier
		DIGITAL TRANSMISSION SYSTEMS
1	365-001-011*	D Channel Banks By Frame
2	365-001-012*	D Channel Banks By End Office
3	365-001-013*	T1 Lines
4	365-001-014*	T1C Lines
5	365-001-015*	T1 Outstate
6	365-001-016*	Digital Multiplex
7	365-001-017*	Wideband Data
8	365-001-018*	T2 Lines
9	365-001-019*	T4M Digital Line
10	365-001-020*	T1D Lines

* Denotes the ETL has been issued in the new ETL format.

TABLE A (Contd)

ETLs THAT HAVE BEEN ISSUED

GENERIC	SECTION	TITLE
		RADIO
	404-001-011	Manual Mobile Radio
	405-001-011	MJ, MK, and ML Mobile Radio-Telephone
	406-001-011	Air-Ground Radio
	407-001-011	Personal Radio Services
	408-001-011	Motorola, RCA, Federal, REL, Narrowband Auxiliary Channel and Other Non-Western Electric Microwave Radio and TV Off-the-Air Pick-up Services
	412-001-011	TH-1 Microwave Radio
	413-001-011	TH-3 Microwave Radio
	415-001-011	TD-3D Microwave Radio
	416-001-011	TN-1 Microwave
	420-001-011	Microwave Radio — Common Equipment
		MICROWAVE RADIO
1	421-001-011*	DR 6-30 Digital System
2	421-001-012*	DR 11-40 Digital System
3	421-001-013*	FR 6-30 Analog System
4	402-001-011*	Antennas
5	409-001-011*	TJ Radio
6	409-001-012*	TL-1 Radio
7	409-001-013*	TL-2/TM-1 Radio
8	409-001-014*	TM-2/TM-2A Radio
9	409-001-015*	Short Haul Radio
10	410-001-011*	TD-2 Radio
11	411-001-011*	TD-3 Radio
12	413-001-011*	TH-3 Radio
13	415-001-011*	TD-3D Radio
14	416-001-011*	TN-1 Radio
15	417-001-011*	3A Radio Digital System
16	420-001-011*	FM Terminals
17	420-001-012*	Auxiliary Systems
18	420-001-013*	Protection Switching
19	371-001-011*	Broadband Restoration
20	104-001-011*	Radio Test Equipment
		SPECIAL SERVICES FORCE ADMINISTRATION DATA SYSTEM (FADS)
	476-001-011	No. 2A Automatic Call Distributor (ACD)
	476-001-013	No. 3A Automatic Call Distributor (ACD)
		PRIVATE BRANCH EXCHANGES (PBX)
	534-001-011	Sections Applying to More Than One PBX Series — 500, 600, 700, and 800 Series — Manual and Dial PBX
	536-001-011	500 Series PBX
	538-001-011	600 Series PBX
	540-001-011	700 Series Step-By-Step and Crossbar Type PBX

* Denotes the ETL has been issued in the new ETL format.

TABLE A (Contd)

ETLs THAT HAVE BEEN ISSUED

GENERIC	SECTION	TITLE
		PRIVATE BRANCH EXCHANGES (PBX) (Contd)
	540-001-013	Step-By-Step Centrex CU and Step-By-Step PBX TOUCH-TONE Equipment and Circuits
	541-001-011	700C and 710C PBX
	542-001-011	701- and 711-Type PBX
	543-001-011	702A PBX
	546-001-011	740-Type PBX
	548-001-011	750A PBX
	550-001-011	755A PBX
	551-001-011	756A PBX
	551-001-012	757A PBX
	551-001-014	758A and 758B PBX
	551-001-015	758C PBX
	551-001-017	761 and 770 PBX
		TEST CENTER OPERATION
	660-001-011	Test Center Operation
	662-001-011	Cable and Local Test Desks and Local Test Cabinets
	664-001-011	Test Boards for Other than Special Services
	666-001-011	Test Boards for Test Positions for Special Services
	668-001-011	Data Test Center
	770-001-011	Toll Type Equipment — Building Operation

TABLE B

SECTIONS APPLYING TO SYSTEMS WITH CMPS BUT NOT INCLUDED IN ANY ETLS

SECTION NO.	SUBJECT
	LINE CONCENTRATORS
067-105-501	No. 1A Concentrator — Preinstallation Tests
067-105-502	No. 1A — System Tests
067-106-502	No. 1A — With MF Signaling — System Tests
067-109-502	No. 2A — System Tests
067-110-502	No. 2B — System Tests
067-201-501	Gfeller Line Concentrator — Tests
067-201-502	Gfeller Line Concentrator — Tests
067-201-701	Gfeller LC-49-9-2, 49-11+1-2, 49-12-2 — Apparatus Requirements and Adjusting Procedures
067-201-801	Gfeller LC — Maintenance Tests
067-301-501	No. 520A Type PBX — Emergency Reporting System — Operating Tests
067-302-501	LC Assoc/w No. 520-Type PBX — Tests Using Test Ckt SD-98067-1
067-302-502	LC Assoc/w Controller Ckt Tests Using Test Ckt SD-98067-01
067-302-503	LC Assoc/w No. 520-Type PBX — OGT Ckts — Operation Tests
067-303-501	Long Lines Ckts Assoc/w No. 520-Type PBX — Tests
067-304-501	Selective Routing Ckts. Used w/Direct Lines Assoc/w No. 520-Type PBX — Tests
	PBX AND STATION TEST EQUIPMENT
	Stations
105-240-100	No. 81A Test Set — Operation Tests
	PBX Test Equipment
105-601-501	Solid State Converter and Receiver Test Set SD-66890-01 — Operation Tests
	CUSTOMER EQUIPMENT
	MISCELLANEOUS
463-110-200	Auxiliary Signals — Installation and Maintenance
463-120-100	Power Relay Sets — Maintenance
463-220-100	Loudspeaker Sets — 106 Type — Maintenance
463-230-300	Recorder Connectors — 50 Type & Assoc. KS-16730, L-1 — Maintenance
463-230-400	Recorder — Connectors — KS-19645, L-1, L-2 — Maintenance
463-233-300	KS-19522, L-1, and L-2 Recorder Couplers, KS-19522, L-11 Voice Control Unit, and KS-19522, L-12 Test Set — Maintenance
463-234-100	KS-19522, L-1 and L-2, Recorder Couplers Used With KS-16765, L-1 Announcement Set — Maintenance
463-236-100	KS-20445 Control Unit — Operating Tests and Maintenance
463-300-101	Interconnecting Unit F-58003 and Assoc. F-58004 KTU and F-58015 Console — Maintenance
463-300-110	I Control Unit F-58010 — Maintenance
463-300-120	I Control Unit F-58005 — Maintenance
463-300-130	Voice Coupler F-58008 — Maintenance

TABLE B (Contd)

SECTIONS APPLYING TO SYSTEMS WITH CMPS BUT NOT INCLUDED IN ANY ETLS

SECTION NO.	SUBJECT
	Customer Training Equipment
473-401-100	KS-21102 Business Phone Trainer — Description and Maintenance
473-401-101	KS-21564 Business Phone Trainer — Description and Maintenance
473-411-100	KS-16605 Teletrainer — Description and Maintenance
	Telephone Answering Systems — Sections Common to Customer and Central Office Equipment
473-500-101	KS-21056 Test Set (SD-99608-01) — Used With Line Concentrator-Identifier Systems — Description, Calibration, and Operation
473-500-501	Tone Signaling Circuit SD-99556-01 (J59202) — Used With Line Concentrator-Identifier Systems — Tests and Adjustments
473-501-201	Line Concentrator-Identifier System — Applied to Telephone Secretarial Service — Tests and Inspections at Time of Installation
473-501-202	Line Concentrator-Identifier (J93021) — Used With Electromechanical Central Offices — Tests and Inspections at Time of Installation Using Test Set KS-21056
473-501-501	Line Concentrator-Identifier System — Applied to Telephone Secretarial Answering Service — Circuit Tests and Trouble Analysis
473-501-502	Line Concentrator-Identifier (J93021) — Used With Electromechanical Central Offices — Circuit Tests and Trouble Analysis Using Test Set KS-21056
473-503-100	Occasional Service System (J99317) for Use With Telephone Answering Systems — Description and Operation Information
473-505-201	Line Concentrator (J93022) — Identifier (J93021) — For Use With No. 1 Electronic Switching System (No. 1 ESS) — Tests and Inspections at Time of Installation
473-505-202	Line Concentrator (J93022) — Identifier (J93021) — Used With No. 1 and No. 2 Electronic Switching Systems — Tests and Inspections at Time of Installation Using Test Set KS-21056
473-505-501	Line Concentrator (J93022) — Identifier (J93021) — For Use With No. 1 Electronic Switching System (No. 1 ESS) — Circuit Tests and Trouble Analysis
473-505-502	Line Concentrator (J93022) — Identifier (J93021) — Used With No. 1 and No. 2 Electronic Switching Systems — Circuit Tests and Trouble Analysis Using Test Set KS-21056
	Telephone Answering Systems — Sections Covering Customer Equipment
473-601-210	Tests and Inspections at Time of Installation — 557A PBX
473-601-501	Circuit Tests for Secretarial Answering Service — 557A PBX
473-602-210	Tests and Inspections at Time of Installation for Secretarial Answering Service — 557B PBX
473-602-501	Circuit Tests for Secretarial Answering Service — 557B PBX
473-607-501	Occasional Service Circuit — SD-96605-01 and SD-96606-01 — For Telephone Answering Systems — Operation Tests (Performed at Telephone Answering Bureau)
473-675-201	100A Telephone Answering System — Identification, Installation, Operation, Connections and Maintenance

TABLE B (Contd)

SECTIONS APPLYING TO SYSTEMS WITH CMPS BUT NOT INCLUDED IN ANY ETLS

SECTION NO.	SUBJECT
	Telephone Answering Systems – Sections Covering Central Office Equipment
473-703-501	Occasional Service Circuit — SD-96605-01 and SD-96606 -01 — For Telephone Answering Systems — Operation Tests (Performed at Central Office)
	CALL DISTRIBUTING SYSTEM NO. 1S, INFORMATION DESKS, AND ORDER TURRETS – CUSTOMER EQUIPMENT
	No. 1S Automatic Call Distributing System
475-100-520	Circuit Tests
	No. 1, 2, 2A and 4 Order Turrets
475-200-300	Order Turret — No. 1 — Tests and Adjustments
	No. 3 Order Turret
475-300-310	Alarms — Method of Tracing
475-300-320	Method of Taking Equipment Out of Service
475-300-505	Allotter Circuit and Associated Alarm and Registers — Tests and Inspections
475-300-507	Attendant Telephone and Trunk Circuits — Operation Tests
475-300-520	Calls Waiting Signal and Register Circuit — Tests and Inspections
475-300-655	Start Circuit and Associated Alarm Circuit — Tests and Inspections
475-300-665	Incoming Trunks — Incoming Trunk Selector Control Circuit — Operation Sets
	No. 6A Order Turret
475-600-310	Alarms — Method of Tracing
475-600-500	Alarm and Common Group Circuits — Tests and Inspections
475-600-507	Attendant Trunk and Position Circuits — Operation Tests — PBX Information Desk
475-600-664	Night Service Trunk Circuit SD-5E036-01 — Operation Test
475-600-665	Trunk Finders — Operation Tests
475-600-666	Incoming Trunks — Operation Tests — PBX Information Desk
475-600-667	Overflow Trunk Circuit SD-5E033-01 — Operation Tests
475-600-669	Overflow Control Circuit SD-5E026-01 — Operation Test
	PRIVATE SERVICE SYSTEMS – CUSTOMER EQUIPMENT
480-010-100	4-Wire Private Line Circuit — Powered From Central Office SD-69902-01 — Identification, Connections, and Tests
	Crash Alarm and Command Conference Systems
480-139-500	Crash Alarm Circuits — Operation Tests — 551A, 551B, 551D, 604C, 605A, 701A and 711A PBX
480-139-501	Crash Alarm Circuits — Arranged for Continuous Test of Station Lines — Operation Tests — 701A or 711A PBX
480-139-520	Command Conference Circuits — Operation Tests — 605A, 701A, and 711A PBX

TABLE B (Contd)

SECTIONS APPLYING TO SYSTEMS WITH CMPS BUT NOT INCLUDED IN ANY ETLS

SECTION NO.	SUBJECT
463-300-140	Interconnecting Key Telephone Unit F-58006 — Maintenance
463-300-150	Interconnecting Key Telephone Unit F-58007 — Maintenance
463-311-100	Voice Connecting Arrangements QKT and QKTBT — 30-Type Voice Coupler
463-331-100	Voice Connecting Arrangement CDB — F-58005
463-340-100	Voice Connecting Arrangements CAU, SU3, SU4, SU6, and SU7
463-340-110	Voice Connecting Arrangements RDL and RDM
463-340-111	Voice Connecting Arrangements RDL and RDM — KS-19552, L-1 & L-2 Recorder Coupler Used With KS-16765, L-1 Announcement Set
463-350-104	Protective Connecting Arrangements CDH and CBF
463-360-100	Protective Connecting Arrangements CDQ4W and CDQ4X

SPECIAL SERVICES

Protection of Service, Code Calling, Recorded Telephone Dictation, Answering Systems, and Transmitter Transfer

473-105-501	SD-1E031-01 — Circuits Tests and Adjustments
473-115-300	1A and 1B Code Calling Systems — Maintenance
473-120-520	2A Code Calling System — Circuit Tests
473-121-520	3A Code Calling System — Operation Tests
473-130-501	Recorded Telephone Dictation Trunks SD-65728-01 and SD-65788-01 — Operation Tests
473-169-511	Dispatching Service — 508A PBX — Circuit Tests
473-180-520	Message Waiting Service — Circuit Tests
473-185-210	Transmitter Transfer Unit — Maintenance
473-218-210	520-Type PBX — Direct Line and Concentrator Systems — Tests and Inspection at Time of Installation
473-218-500	Alarm Circuit SD-98053-01 — Operation Tests
473-218-520	Call Recording Circuits — Operation Tests
473-218-525	Cord and Position Circuits — Tests and Inspections
473-218-610	Display Control Circuit SD-98060-01 and Number Display Control Circuit SD-98128-01 — Operation Tests — Concentrator System
473-218-630	Paging Line and Status and Annunciator Circuits — Operation Tests
473-218-655	Selective Routing Circuits Used With Direct Lines — Operation Tests
473-218-660	Station Line Circuits and Flash and Wink Circuits — Operation Tests
473-218-661	Long Line Circuit SD-99545-01 — Operation Tests
473-218-665	Central Office Trunk Circuits — SD-99362-01 and SD-98051-01 — Operation Tests
473-219-300	Industrial Reporting System — Method of Operation
473-219-500	Industrial Reporting System — Circuit Tests

Manual PBX (Other Than 520-Type)

473-228-540	Key Ended Lines — (Terminated in Turret) — Operation Tests
473-228-541	Jack Ended Lines — (Separate from PBX) — Operation Tests
473-228-543	Jack Ended Lines — Operation Tests — 551A, 551B, 551D, 552A, 552B, 552D, 552E, 555, 604C, and 605A PBX

Station Equipment Arrangements

473-310-100	Public Emergency Reporting Systems — Identification, Installation, Connections, and Maintenance

TABLE B (Contd)

SECTIONS APPLYING TO SYSTEMS WITH CMPS BUT NOT INCLUDED IN ANY ETLS

SECTION NO.	SUBJECT
	Civil Defense Warning (CDW) System – Station Equipment
480-210-200	Bell and Lights — Installation and Maintenance
	Group Alerting System – Station Apparatus
480-310-200	Installation and Maintenance
	Sage Systems – 112A Key Equipment and SAC Main Operating Base Turret
480-510-106	Addressable Data Station Switching — Circuit SD-1G244-01, and Site Control Circuit SD-1G246-01 — Maintenance
480-520-501	SAC Main Operating Base Turret — Lineup and Overall Tests
	Preemption Tone Detector (AUTOVON) – Customer-Provided PBX or Station
480-611-100	Identification, Connections, Maintenance
	Switching Systems – Customer Equipment
480-707-501	No. 302 — Tests, Inspections, and Lineup
480-708-501	No. 301A — Lineup and Overall Tests
480-710-501	No. 300 — Overall Tests Using J53026BN Portable Test Box or J53026EW Portable Test Set Equipped With Dial Pulse Counter
480-711-500	No. 304 — Overall Tests
480-713-500	No. 306 — Lineup and Overall Tests
480-714-501	No. 307 — 4-Wire CO Line Circuit Unit — Maintenance Tests
480-714-302	No. 307 — Line Transfer Circuit Unit — Maintenance Tests
480-714-303	No. 307 — Sequence Circuit Unit — Maintenance Tests
480-714-304	No. 307 — Dual Access Switch — Maintenance Tests
480-714-305	No. 307 — 2626A1 Key Telephone Set — Maintenance Tests
480-714-306	No. 307 — Alarm Circuit — Maintenance Tests
480-714-500	No. 307 — Station Test Procedures
480-714-501	No. 307 — Out-of-Service Test — Procedures for High-Speed Send/Receive (HS S/R) Station
480-716-200	No. 309 — Identification, Installation, Connections, and Tests and Inspections During Installation
480-716-501	No. 309 In-Service Operational Tests
480-717-300	No. 310 Console — Method of Operation
480-717-500	No. 310 — Lineup and Overall Tests
	PBX Access Lines – AUTOVON
480-801-500	812A — Initial Lineup and Maintenance Tests

EQUIPMENT TEST LIST — DESCRIPTION AND LIST OF ISSUED ETLs
ADMINISTRATIVE MAINTENANCE METHODS
GENERAL METHODS

1. GENERAL

1.001 This addendum supplements Section 010-300-011, Issue 8. Place this pink sheet ahead of Page 1 of the section.

1.002 This addendum is reissued to update the AT&T Section from Issue 7 to Issue 8.

1.003 This addendum was originally issued to clarify the preventive maintenance (central office) supervisor's responsibility for ETL updates.

1.004 Refer to the following sections for additional information:

- Section 190-130-010 SPCS/SCC Control Maintenance Plan
- Section 190-305-307 Method of Updating — Preventive Maintenance (COMMS-PM)
- Section 201-020-510 Controlled Maintenance Plan for Switching Systems — General

2. CHANGES TO SECTION

2.001 On Page 2, after paragraph 1.10, add the following new paragraph:

1.11 Preventive maintenance (PM) supervisors must initiate all changes and exceptions for local routines and validate new ETLs with the appropriate work loading center (ie, COMMS, SCC, TMC, etc).

(a) One function of the COMMS routine list allows the PM supervisor to modify standard ETL specifications to meet local needs.

(b) When ETL files are annually revised, COMMS/SCC/TMC does not provide checks on local routines. All updates for these routines must be initiated by the PM supervisor.

(c) COMMS/SCC/TMC ETL files are automatically updated when system wide ETL changes are made. COMMS/SCC/TMC notifies the PM supervisor of any pertinent changes, and with the supervisor's concurrence, processes the ETL changes and supplies a revised schedule.

Note: It is a responsibility of the PM supervisor, under the controlled maintenance plan (CMP), to determine equipment responsibility, locate CMPs, for specific equipment and develop one overall, integrated plan for maintenance of a particular equipment responsibility area.

NOTICE
The information contained herein should be disclosed to unauthorized persons. It is meant for use by authorized representatives of U S WEST, Inc. and Mountain, Northwestern and Pacific Northwest Bell Telephone Companies only.